

paratively few, and his ability can hardly be said to have been appreciated here. All who knew him held him in high esteem, as he was uniformly kind, courteous and charitable. He leaves three sons and one daughter, two of the sons, F. A. and Leo Lesquereux, living in this city, and H. C. Lesquereux in Springfield, Mass. His daughter is Mrs. Anna Earhart, widow of Edmunds Earhart, of Marion township."

Lesquereux's retiring disposition prevents us from knowing the full extent of his labors, and, perhaps, the full extent of his worth. It is safe to rank him, however, as the second bryologist of this country. The country of his adoption shares his fame with the country of his birth. His name is worthy of a place with those of his warm friends, Agassiz and Guyot.

BRIEFER ARTICLES.

Double flowers of the *Epigaea repens*.—This species attracted the attention of botanists several years ago by its polymorphous stamens and pistils, and its tendency to dioeciousness. It occasionally indulges in the freak of putting forth double flowers. One locality where these are produced year after year is at Plymouth, N. H. The flowers sent for examination from this place were large, deep pink in color, and with their numerous petals, much prettier than the ordinary single ones. There was great variation in the degree of transformation of stamens to petals. Three-fourths of the number of flowers examined had two circles of five petals each, the inner alternate with the outer, and five stamens alternate with the inner petals. The outer circle formed the normal salver-shaped corolla with ovate lobes, but the inner was composed of five distinct and very unequal petals with the margins irregularly indented or toothed. The filaments of the stamens were broadened towards the top, as if on the point of expanding into a blade, and bore imperfectly developed brownish anthers which rarely contained any pollen. In other flowers considerable variation in the degrees of cohesion and adhesion was observed. It was not infrequent to find two short-formed stamens adherent to the base of an inner petal.

In a few, more double flowers, the transformation of the ten stamens to petals was nearly complete, forming three circles which showed all stages of transition from a narrowly spatulate form suggestive of a broadened filament without the anther, to a perfectly formed petal. A noticeable feature in these cases was the cohesion of two or more, rarely of three, petals of the inner circles, pointing to the formation of an inner corolla tube.

The most curious change of all had taken place in the pistil, which

instead of having the ovoid conical ovary, slender style and five stellate stigmas of the typical flower, consisted of leaf-like bodies closely rolled or twisted together and an ovary broadened and flattened like an oblate spheroid. This conformation of the pistil occurred even in the least double flowers, and seemed, therefore, to be the first organ to undergo modification. A view of the pistil laid open furnished a fine illustration of the reversion of essential organs to leaves. It was composed of five, and frequently of six or seven leafy carpels, only slightly coherent at base, of a pale green color and thin in texture. The long acuminate apex of each was infolded and sometimes inclosed by the wavy-curled, involute margins of the basal portion. When the number of carpels was more than five, the extra ones were either inclosed within the others or appeared as lateral outgrowths from near the base.

Ovules were entirely wanting in the flowers with three circles of petals; in others a few were found larger and flatter than those of the single flower, and passing through intermediate pointed forms to a rounded body bearing a miniature leaf at the top.

The *Epigæa* receives so unkindly any attempt to cultivate it, that it would be interesting to know what peculiar conditions of its native surroundings have induced it to produce these double flowers.—KATE EASTMAN WILSON, *Wellesley College*.

EDITORIAL.

The GAZETTE greets its friends this new year and decade with fresh hopes and promises. The last decade has seen much activity among American botanists, and the GAZETTE has done its share in recording it. Much more botanical work is being done in this country now than ever before. Nearly all who hold botanical positions have seen the necessity of original work. No complaint can be made of the amount being done, but there may be a question as to the quality. We believe that the general quality of American work is improving, not merely on account of the increasing contact with foreign laboratories, but chiefly on account of better general training. Doubtless there are still instances of young men who spend a year or two in German laboratories, imbibe their egotism along with their methods, and then return with the purpose of enlightening us, but these cases are becoming fewer and must presently disappear. But if the quality of American work is improving there is still much to be desired. There are some workers of whom we are justly proud, but there are still many of the kind that have given us an uncomfortable reputation. Three kinds of work occur to us as especially abundant. The first is undertaken by those who have no conception of the meaning of original work. These are apt to write most voluminously, collating from